



RECEIVED  
OCT 17 2003  
TC 1700

Attorney Docket No. 095309.50125MI  
PATENT

*D. Dapone*  
#1913  
10.22.03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: KLAUS BINDER ET AL.

**DO NOT ENTER**

Serial No.: 09/608,761

Group Art Unit: 1743

**OK TO ENTER**

Filed: JUNE 30, 2000

Examiner: Soderquist, Arlen

**OK AS ENTERED**

Title: METHOD AND APPARATUS FOR DETERMINING THE  
STORAGE STATE OF AN AMMONIA-STORING SCR CATALYST

RESPONSE TO FINAL REJECTION UNDER 37 C.F.R. §1.116

Mail Stop: AF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Final patent Office Action contains a rejection of claims 1-14, 18 and 21 under 35 U.S.C. 103 as unpatentable over the reference to Haas U.S. Patent No. 5,143,696 or Schmelz in view of Daudel, Kurzweil, D'Amico and Tsutsumi as indicated at item 2 on pages 2-4 of the patent Office Action. This rejection is a repetition of the rejection in the March 13, 2003 patent Office Action.

In order to be responsive to the Final Rejection, Applicants draw attention to item 3 on page 4 and the top of page 5 of the patent Office Action in which the arguments filed on June 13, 2003 were considered by the Examiner but were not persuasive. The Examiner indicates that independent claims has no requirement that the measuring pickup be applied to the surface of the catalytic and furthermore the references are applied to the surface of the catalyst. Furthermore the claim structure does not require, according to the Examiner, that the catalyst be in

contact with an exhaust gas so that no meaning is given to the phrase "SCR catalyst" because the environment is only minimally defined. According to the Examiner, a catalyst is "still a catalyst whether it is being tested or in actual use". Therefore, the disclosure of the primary reference teaches SCR catalyst and there is no distinction which can be made with respect to a method of testing materials and actually using the materials, according to the reasoning of the Examiner.

Applicants wish to point out the independent claims 1 and 14 provide method steps which are not available from the reference. Independent claim 1 requires the determination of the storage state of ammonia-absorbing SCR catalyst by applying a measuring pickup to the SCR catalyst and sensing a physical property of the catalyst from the measuring pickup. Most importantly however, the result is a determination of "the storage state on the basis of said physical property".

It has been acknowledged that the references of record and particularly the reference to Schmelz is described in the background of the invention of the present application as implying a method which is improved upon by the present invention.

The reference to Schmelz and the reference to Haas are concerned with measuring the electrical conductivity of a material which is identical to the SCR catalyst material with regard to its physical property. According to the Examiner the measurement of a material is the same thing as a measurement of the catalyst. There is one critical difference however. The material being measured does not have a storage state because it is not being employed as a catalyst and the present

invention, as defined by independent claim 1, requires applying a measuring pickup to the catalyst itself and sensing a physical property of the catalyst wherein this physical property determines the storage state of the SCR catalyst. Employing a pickup of a material which is not functioning in a catalyst environment does not provide determination of a storage state of a catalyst. The storage state of a catalyst changes over time depending on the exhaust gas and other conditions. The measurement of a particular property of a material which could be later employed as a catalyst certainly has no bearing on the storage state of the catalyst. Independent claim 1 does not apply a measuring pickup to a catalyst material. It concerns applying a measuring pickup to the catalyst itself which means that the catalyst is functioning or has functioned and it is the storage state which is measured on the basis of this measured physical property.

Independent claim 10 has an environment where the material identical to a catalyst material is applied in addition to the catalyst but that material is arranged in an exhaust gas stream and that material is sensed when it is in that exhaust stream in order to determine the storage state of the catalyst.

In addition dependent claims 2-14 and 18 and 21 are replete with particular limitations concerning measurements and the manner in which the test is conducted as well the particular physical property which is obtained.

Applicants submit that testing a material, as is accomplished in the references of the prior art, cannot determine the storage state of a catalyst because

that material has not yet been subjected to a catalyst environment. It is true that if a catalyst has never been used it will have a empty storage state but once a catalyst is used its storage state changes and no testing of a material outside of the material environment will provide that storage state because it has never been subjected to the exhaust gas. The prior art determines properties of a material which could be used as a catalyst but it cannot determine the storage state of a catalyst.

The analogy used in the final rejection is similar to indicating that a temperature of an engine can be determined by conducting a test on a thermal detection material. The storage state is, by analogy equivalent to the temperature of an engine but testing of a thermal detection outside of the engine cannot give the temperature of the engine. Similarly testing of a catalyst material cannot give the storage state of a catalyst.

The secondary references even, accepting the statement of the rejection for their showing, add nothing toward meeting the claim limitation of independent claims 1 and 10.

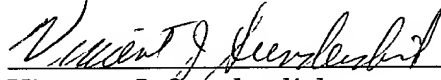
Therefore, Applicants respectfully request reconsideration and allowance of this application containing claims 1-14, 18 and 21.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #095309.50125MI).

October 15, 2003

Respectfully submitted,



Vincent J. Sunderdick  
Registration No. 29,004

CROWELL & MORING, LLP  
P.O. Box 14300  
Washington, DC 20044-4300  
Telephone No.: (202) 624-2500  
Facsimile No.: (202) 628-8844a

VJS:adb